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ABSTRACT

The results from two informal measures (a cloze test and a group reading inventory and a standardized reading test were compared in a study of instruments available for measuring adult reading performance. The three instruments were administered to 158 undergraduates enrolled in reading improvement classes. From this group, 75 subjects were randomly selected for analysis. The resulting data indicated that, in general, both a cloze test and a group reading inventory accurately discriminate levels of adult reading performance. The results suggest that the two informal measures, when used with adults, may provide appropriate alternatives to standardized tests. (FL)

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A Comparative Study of Informal Group Assessment Procedures And Standardized Reading Test Performance

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There are numerous formal and informal screening instruments available for measuring adult reading performance. Frequently used group placement procedures include administering a cloze test (Bormuth, 1968; Taylor, 1953) or a group standardized reading test. This study was directed toward comparing results from a cloze test, a Group Reading Inventory (GRI) and a standardized reading test.

Procedures

Subjects

Three instruments were administered to 158 college freshman and sophomore students voluntarily enrolled in six reading improvement classes. From this population, test results for 75 subjects were randomly selected for analysis.

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The reading level of the sample ranged from 7th to 15+ grade level with a mean score of 9.6.

Instruments

A Group Reading Inventory is an informal test administered to determine if specific reading materials are too easy (independent level), appropriate (instructional level) or too difficult (frustration level). In this investigation, the test required the subjects to read a 480 word passage about the monetary system in America. The passage was determined to be written on approximately the 9th grade level of difficulty as measured by the Fry Readability Graph (Fry, 1968). The subjects were then asked to answer 14 specific questions based on the passage without looking back at the material. Four different types of passage dependent questions were used on the GRI: Questions 1, 13 - understanding main ideas; Questions 2,4,6 - using context; Questions 3,5,7,9,11 - understanding details; and Questions 8,10,12,14 - making inferences.

Unlike the cloze procedure, literature concerning the use of GRI's is relatively limited. An extensive search of published literature revealed a shortness in number, empirical support and general use of Group Reading Inventories. Most sources describe the technique, construction, scoring and interpretation of a GRI and perhaps, include sample inventories (Burron & Claybaugh, 1974; Dishner and Readence, 1977; Kaiser, 1975; Hafner, 1976; Koenke, 1972; Marksheffel, 1966; McWilliams and Rakes, 1979; Miller, 1974; Rakes, 1975; Rakes and McWilliams, 1978; Shepherd, 1973; Strang, 1964; and Viox, 1968). Not only is the pool of GRI literature limited but it is universally characterized by a lack of information conerning the validity of a GRI. While no reports are provided contrary to the fact, no empirical basis exists to support the use of Group Reading Inventories as a useful group screening technique.

Much emperical support exists relative to the use of a cloze procedure as a group placement instrument (Bormuth, 1968; Bormuth, 1975; Peterson and Carroll, 1974; Rankin & Culhane, 1969; and Taylor, 1953). For this study, a 54 blank passage was used with every 7th word deleted (excluding the first and last sentences). The following scoring levels were used with an exact word replacement procedure. Independent level - 58% correct or higher; Instructional level - 37% - 57% correct; and Frustration level - 36% or lower.

The Nelson-Denny Reading Test, Form C (NDRT) (Brown, Nelson & Denny, 1973) was administered as a group standardized measure of silent reading ability. The NDRT is generally considered a leading standardized test of high school and college reading achievement (Buros, 1965). Reading performance scores were provided in the areas of rate, comprehension, vocabulary and total reading. The order of test administration was rotated among the six classes so that each of the three instruments was given an equal number times as the first, second and third test administered on Monday, Wednesday and Friday of the same week.

Analysis of Data

Data were treated by computer analysis using a parametric and non-parametric portion of the Statistical Package for Social Sciences (Nie, Hull, Jenkins, Steinbrenner and Bent, 1975). The program used included a Spearman Rank Order correlation and a chi-square evaluation of the associations between three assigned reading level placements (independent, instruction and frustration levels) for each of three test instruments. Cramer's V was applied to measure strength of relationship by adjusting the chi-square value.

Results and Discussion

The Spearman Rank Order correlation indicated a significant correlation existed among the Nelson-Denny Reading Test, Form C, a Group Reading Inventory and a cloze test at the .001 level of confidence. The analysis also indicated

that two subtests within the NDRT were significantly intercorrelated: vocabulary with total reading and comprehension with total reading. See Table I for specific numerical information.

(Insert Table I About Here)

A chi-square test of significance was applied to cummulative frequencies for scores from three test instruments arranged into three categories; independent, instructional and frustration (totaling 9 cells). A chi-square value of 8.67 was not significant at the .05 level of confidence. Calculation of Cramer's V revealed that there was a very weak pattern of association between the accuracy of level classifications for each test administered.

The data indicated, in general, that both a cloze test and a Group Reading Inventory accurately discriminate levels of reading performance when used with adult subjects. Correlation values were statistically significant. However, these values were, in some cases, sufficiently low to warrant continues investigation. Since the chi-square test revealed no significant differences, there is some basis to support use of both cloze and GRI tests as at least, equally as discriminating as the Nelson-Denny Reading Test, Form, C.

When used with adults, the two informal test procedures as described in this study, may provide appropriate alternatives to standardized tests. Carefully constructed informal tests using classroom materials have been suggested for several years. Data from this sample indicates some basis for using two group informal procedures with adult readers. Effective uses may include administration to students in General Educational Development (GED) preparatory classes in one or more examination area (e.g. science, literature or reading comprehension); to adults in college level courses requiring the use of a textbook or other printed matter; and to business and vocational trainees as a pre-test for specialized

training materials. Recent interest in competency testing coupled with an overall lack of information provided on many norm referenced standardized tests, make the use of GRI's and cloze tests more feasible. It is evident that similar studies are needed involving additional subject groups and using a variety of printed material from content area subjects, locational skills tests, cloze tests and other standardized instruments. Special attention must be given to comparisons of like instruments. While it is realized that comparing results from informal and standardized test instruments is not technically desirable; such comparisons do provide a practical basis for user comparability of the values of such procedures in terms of information provided, time required for use and power to discriminate between three basic levels of reading performance.

Table One

RANK ORDER CORRELATIONS FOR THE NELSON-DENNY READING TEST, CLOZE TEST AND GROUP READING INVENTORY RAW SCORES

	ND-R	ND-V	ND-TR	ND-C	GRI	CLOZE
ND Rate	-	.2624	.3371	.1971	.6248*	.5832*
ND Vocabulary	.2624	-	.6634*	.2829	.4332*	.6641*
ND Total Reading	.3371	.6634*	-	.7575*	.8446*	.6112*
ND Comprehension	.1971	.2829	.7575*	-	.7993*	.8163*
GRI Score	.6348*	.4332*	.8446*	.7993*	-	.8102*
Cloze Score	.5832*	.6641*	.6112*	.8136*	.8102*	-

N = 75 *p < .001

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